

An Essay

on the

Inhalation of Medicines

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by

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## Orphalation of Medicine

The <sup>way</sup> ~~modus operandi~~ of medicinal agents has for centuries furnished the medical world a theme, for much and animated controversy. Two general and almost exclusive theories, each having their equally exclusive partisans, have in the main been adopted — known as the sympathetic and the absorbent.

The adherents of the former maintain, that ~~these~~ medicines, when brought in contiguity with the peripheral nerves distributed upon the membranes lining the stomach and other viscera, produce phenomena on all, even the most remote parts of the organism, through the medium of nervous sympathy.



The advocates of the latter, hold that all dissolved agents are taken up by the capillary vessels and lacteal, and conveyed through the circulation to all parts of the body, producing their various phenomena by actual contact with the different tissues.

The strongest example of a purely sympathetic agency, are found in the action of Prussic and Hydrocyanic Acid. Those who have taken the former even in a remarkably minute quantity, have observed marked effects of it in a few seconds, though a particle of it had not been swallowed.

The latter has been known to produce symptoms on the human subject in fifteen seconds, and to prove fatal



to young cats in from five to ten seconds,  
a time considered too brief for it to become  
absorbed into the circulation.

The absorbent doctrine rests upon  
the general fact, that mineral and  
saline medicines, and such other  
agents as are detectable by chemical  
tests, and also those which possess  
obvious properties, are generally capable  
of being detected in the blood, and  
often also in the exhalation from the lungs.

It affects not essentially our  
inquiry which theory we may adopt  
to explain the mode by which the  
pathogenic effect of medicinal agents  
are produced. It is highly problem-  
atical that the infinitesimal atom  
acts upon the same organs and



system, and through the same medium  
as the gross material.

The intimate connection which the  
anatomical and physiological relation  
of the stomach and lungs with their  
passage, bear upon our subject,  
renders a general notice of them  
necessary.

These organs are each lined with  
a mucous membrane. That which  
lines the stomach is about a line  
in thickness, and when undisturbed is  
arranged in numerous rugae or folds,  
and is continuous with the oesophagus  
and the duodenum below. It is soft,  
villous, and of a light pink color.

The lining membrane of the air  
passage and lungs, is of an exceedingly



delicate structure, smooth and almost transparent. It extends through the minutest radicles of the bronchia, and opens into the formation of air-cells. The capacity of this organ for air is variously estimated. The median amount taken in at each inspiration is about thirty cubic inches.

Both these membranes are largely supplied with capillaries, the latter however more minutely than the former, for the purpose of exposing a vast amount of blood for oxygenation during the process of respiration. Some idea may be conceived of the great extent of the mucous surface of the lung, and of the infinite number of capillary vessels distributed upon



it, when we bear in mind that a middle sized man has about twenty-eight pounds of blood, and that all this is exposed upon the surface for aeration every four and even three minutes.

Both viscera derive principally their nervous agency from the same source - the Pneumogastric nerve.

The function of one is the digestion of aliment conveyed into it, and by its lacteals the absorption of its nutritive proportion for the maintenance of the body. It also through the arterial and venous capillaries, appropriates all fluids by the process of endosmosis.

The other performs the important function of arterializing the blood



and separating from it, the carbon with which it is charged.

We neither do we find any special provision for the digestion or appropriation of medicinal agents, and hence has arisen the declaration that the human stomach was never intended as a receptacle for medicine.

Having briefly passed in review, those anatomical and physiological characteristics of the stomach and lungs, which are particularly concerned in this inquiry, the most casual observer will not fail to notice the analogy in the structure of their mucous membranes.

That the capillary vessels are principally concerned in the appropriation of medicinal agents, is pretty



clearly established by the carefully conducted experiments of Tidemann and Gmelin.

By incorporating in the food various substances possessing color, odor or chemical properties, by which they might be detected in the fluids - as Gamboge Madder and Blueberry, Musk, Camphor and Cassia seeds, and Saline substances as of Lead, Baryta and Mercury - and allowing a sufficient quantity of them to be taken up. Traces of them were generally found in the venous blood and urine, whilst they were rarely detectable in the chyle.

That the capillaries which supply in still greater profusion the mucous membrane of the lungs, deriving their nervous agency from



The same source, and presenting a vastly greater extent of surface, would be competent to perform the same function. Could agents be brought in contact with this surface without disturbing their natural functions, appears to be a legitimate analogical induction.

It has been proved that water injected into the air passage, enters the pulmonary veins directly, or indirectly by the lymphatics—probably the former.

Examples are not wanting of morbid phenomena, and even fatal consequences, from the absorption and inhalation of medicinal and noxious agents. The odor of perfumery in the blood and urine after inhaling it from Sassafras, Turpentine, Tobacco



Monomium and other remedies produce  
their specific effect both speedily and  
powerfully when inspired.

Sulphuretted Hydrogen, Carburetted  
Hydrogen, Nitrogen, and Carbonic Acid  
cause most immediate death by  
asphyxia. The last has frequently  
produced fatal results without simple  
asphyxia, in sleeping rooms where  
charcoal was burning. Sassailla  
is mentioned by Prof C. B. Matthews,  
as producing violent headache when  
carried in the hat upon the head.

Rhus vernix causes very severe  
Erysipelas by approaching in the  
vicinity of it.

Epidemic and Contagious  
diseases, as Small Pox, Scarletina, Measles



And Typhoid Fever, are supposed to be generated by inhaling this noxious effluvia. Intermittent and Remittent Fevers, also arise from miasmata.

As regards the agents before mentioned, Glonine and Hydrocyanic Acid, it appears to me that their modus operandi is very clear. They are highly volatile even in cool air, and far more so when introduced to an elevated temperature in the cavity of the mouth. Their saline particles are conveyed by the first inspiration to every part of the vastly extended surface of mucous membrane in the lungs, they pass immediately into the capillaries, are carried chiefly to the left auricle and ventricle, and from thence to



the most remote and minute fibres  
of the body. All this may take place  
in the adult probably within ten  
seconds, and in the infant in less  
than half that time.

Hahnemann says "the remedy  
acts just as powerfully by communicating  
its medicinal influence to the system  
through the nasal force and the lung,  
as if a dose of the remedy had been  
swallowed" and also, "by increasing  
the number of respirations, the power  
of the remedy may be increased a  
hundred fold."

According to the views  
of many of the most distinguished  
and experienced homoeopaths of  
the present day, it is of very little



consequence what potency what potency  
is administered provided it be the proper  
homoeopathic specific. Regarding this  
observation as correct, and considering  
it fully established that our medicines  
can be introduced into the lung in a  
sufficient quantity to impinge the  
morbid system, without in any manner  
deranging the harmony of their functions,  
the conclusion is legitimate, that the  
full specific effect of remedies would  
follow their administration by  
inhalation. And certainly if the  
high potencies are capable of modifying  
diseases action, the aura of the thirtyeth  
attenuation or lower could hardly  
fail to act.

But we are not compelled



to rely upon reasoning to support  
our position. We have the testimony  
of one of the most correct medical  
observers of his age—the great founder  
of our system—who seemed to possess  
nearly the same confidence in medicinal  
inhalation, as in its exhibition by the stomach.

Many examples of a most  
striking character of cures by  
inhalation of the high potencies, are  
given by Dr. Gross, and published  
in the first volume of the *Homoeopathic*  
*Examiner*.

In my own brief practice,  
several cases have fallen under my  
observation, exhibiting the most  
brilliant results from this mode  
of administration. The following case



of Traumatic Nimmus, from the rarity  
of its occurrence, and from its extreme  
obstinacy to the Allopathic practice, is  
worthy of notice. In the Spring of  
1849, about three months after  
commencing the homoeopathic practice,  
I was called to Mrs. S. aged about 30  
years, who was bitten in the hand the  
day previous by a cat. She had felt  
no untoward symptoms until this  
morning when she became very stupid  
and unconscious, and the jaws  
firmly locked. I arrived in about  
four hours after this symptom had  
set in. The friends of course had not  
failed to rub her well with Spirit of  
Camphor and strong Assafoetida  
into the mouth but all availed nothing.



All efforts had been made to arouse  
her by shaking and pinching, without  
making any impression. I immediately  
took from my pocket a vial containing  
the 13<sup>th</sup> potency of Thuja Louisa, and  
placing it to her nostril, permitted  
her to inhale twice. In about thirty  
seconds a spasmodic action commenced  
in the lower eyelids - this continued to  
extend and in three minutes the facial  
muscles were involved, and in another  
minute she opened her eyes, which  
were fixed, for the first time in four  
hours. This dose continued to exert  
its influence, and in twenty minutes  
all the muscles relaxed, and she was  
able to converse. There was a strong  
tendency for some days after to a



return of that condition, which was  
readily removed by a repetition of  
the emetic.

I am disposed to think  
that the relative value of this mode  
of administering medicine has been  
far too little regarded by the profession.  
There are numerous cases in which  
there exists an urgent necessity of  
resorting to this mode - the patient  
not being able to swallow. Such  
are apoplexy, epilepsy, mania and  
paralysis of the muscles of deglutition,  
tetanus, hysteria, convulsion, and  
those diseases in which dysphagia  
exists. In the diseases of children  
it is of great advantage when we  
do not wish to disturb their quietude.



Another advantage which this method possesses over that by the stomach, arises out of the fact that this organ is made the receptacle of food and drinks of various and heterogeneous qualities, liable at all times to disturb the legitimate action of the medicine.

The minute quantity has to undergo an intermixture with its contents, rendering the time comparatively long before any considerable proportion of it can pass into the circulation. To produce a salutary reaction of the vital power against the disease, it would seem that the infusion or stimulus of the dynamized agent should be but momentary, so that the reactive force might exert its



full influence. When taken into the stomach, it requires from one to three hours for all its particles to enter the circulation, so that the last taken might act prejudicial to the ~~the~~ reaction of the first.

This objection does not exist to inhalant medicine. It enters immediately the circulation, produces its impression in a few minutes, and leaves the vital organism full and uninterrupted time for reaction.

It may be objected—and with apparent reason—that when medicine is exhibited by the lungs, it is introduced into a medium of Carbonic acid, which might in some degree modify its properties.



This objection however seems to  
exist in full force when taken  
by the mouth. The respiratory  
process is carried on through the medium  
of the mouth and nostrils - and  
under the most cautious manage-  
ment, a certain amount of  
expired air enters the cavity of the  
mouth at every expiration. If it  
possessed antiseptic properties, this  
would be sufficient to destroy the  
free effect of most medicines given.

As medicines however are proved  
with this counteracting influence,  
we do not consider it as exerting  
a modifying influence on the  
agent dynamically administered.

The writer would suggest



That all agents sufficiently volatile  
to be taken into the lungs in a  
quantity capable of producing  
pathogenetic symptoms, should  
be so proved in addition to  
proving them by the stomach.

We are aware that many  
high authorities regard the nerves of  
the stomach as the medium through  
which medicinal agents act upon  
the organism. Even the true it would  
not affect materially our general  
position, as we have the same  
nervous agency in the lungs,  
which supplies the stomach, and  
the objection urged against the  
one would maintain near the  
same relation to the other.



Should the Essay have the  
desired effect, to call the  
attention of the profession more  
directly to this branch of inquiry,  
the writer will feel amply  
rewarded.

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